

[0426] Accordingly, unlike the aforementioned embodiment, even if part of the drain tray 2090' is exposed to the suction path 2120', air may be guided to the blower fan without restricting the air fluidity.

[0427] In other words, in the case of the conventional AC, part of the drain tray arranged in the suction path interferes with the air fluidity, but in accordance with the embodiment of the present disclosure, the problem arising in the conventional AC may be solved by the drain tray 2090' forming the suction path 2120' including a streamlined feature with the suction guide 2100', which does not interfere with the air fluidity.

[0428] In the following, a control case 200 will be described in detail.

[0429] FIG. 69 is an exploded view of a control case, according to an embodiment of the present disclosure. FIG. 70 is a floor plan of a Printed Circuit Board (PCB), according to an embodiment of the present disclosure. FIG. 71 is a floor plan of a PCB assembled in the lower case of a control case, according to an embodiment of the present disclosure. FIGS. 72 to 75 illustrate a wire held in a wire holder, according to an embodiment of the present disclosure.

[0430] Referring to FIGS. 66 to 69, the control case 2200 may be arranged on an edge side of the opening 2091 of the drain tray 2090.

[0431] The control case 2200 may include a curved part 2250 corresponding to the outer circumferential face of the opening 2091. This is to prevent the control case 2200 from being arranged in the suction path 2120 while being arranged on the outer circumferential face of the opening 2091.

[0432] Specifically, the curved part 2250 of the control case 2200 may be arranged to correspond to the edge side of the opening 2091, so that there may be no part of the control case 2200 arranged on the outer side of the drain tray 2090, especially on the inner side of the opening 2091.

[0433] In the case of the conventional AC, the control case may be arranged on the drain tray in a similar way to the embodiment of the present disclosure, but the control case has the form of a box, part of which is exposed to the outer side of the drain tray and located in the suction path 2120, thereby interfering with air fluidity, making noise, and reducing a quantity of fluid.

[0434] Such problems may be solved in the embodiment of the present disclosure, where the control case 2200 is not exposed to the outer side of the drain tray 2090 and thus not located in the suction path 2120.

[0435] Furthermore, as the control case 2200 includes the curved part 2250, it may be covered by the suction guide 2100. Specifically, the curved part 2250 may be formed to correspond to the outer circumferential face of the opening 2091 as well as to correspond to the outer circumferential face of the suction guide 2100.

[0436] The outer circumferential face of the suction guide 2100 may have a radius of curvature corresponding to the inner circumferential face of the opening 2091 because it passes through the opening 2091, and because the curved part 2250 includes a curved plane having a radius of curvature corresponding to the outer circumferential face of the opening 2091, the outer circumferential face of the suction guide 2100 and the curved part 2250 may include their respective curved planes of a corresponding form.

[0437] With the curved part 2250, the suction guide 2100 may be arranged to have the inner circumferential face of a streamlined form as a whole without additional change in the shape, because the control case 2200 has no part protruding to the inner side of the suction guide 2100.

[0438] The control case 2200 may be arranged on the outer side of the outlet 2091 in the radial direction to be located on the drain tray 2090, and may be arranged between the inlet 2011 and the drain tray 2090 with respect to the vertical direction of the AC indoor unit 2001.

[0439] As described above, because the round part 2111 of the suction guide 2100 is formed between the inlet 2011 and the drain tray 2090, the control case 2200 may further include a curved part 2250 corresponding to the round part 2111 in the vertical direction.

[0440] Specifically, when the curved part 2250 corresponding to the opening 2091 is called a first curved part 2251, the control case 2200 may include a second curved part 2252 that has a curved plane corresponding to the round part 2111 in the vertical direction.

[0441] The control case 2200 may be covered by the second curved part 2252 with the suction guide 2100. Because the second curved part 2252 has a curved plane corresponding to the round part 2111, the control case 2200 may be arranged close to the outer circumferential face of the suction guide 2100.

[0442] Accordingly, the suction guide 2100 may be arranged to have the inner circumferential face of a streamlined form as a whole without additional change in the shape, because the control case 2200 has no part protruding to the inner side of the suction guide 2100 even in the vertical direction.

[0443] As shown in FIG. 69, the control case 2200 may include an upper case 2210 that has the first and second curved parts 2251 and 2252, a lower case 2220 that has the first curved part 2251, and a PCB 2230 arranged between the upper and lower cases 2210 and 2220.

[0444] As shown in FIG. 70, the PCB 2230 may include the first curved part 2251. This is to maintain the shape of the entire control case 2200 as the PCB 2230 is assembled inside the cases 2210, 2220.

[0445] However, if, unlike the embodiment of the present disclosure, the PCB 2230 is arranged on only a part of the internal area of the cases 2210, 2220 because the PCB 2230 is smaller in area than the cases 2210, 2220, the PCB 2230 may not include the first curved part 2251.

[0446] As shown in FIG. 71, a wire holder 2260 to hold a wire 2231 extending from the PCB 2230 may be formed in the lower case 2220.

[0447] The PCB 2230 may be electrically connected by the wire 2231 to internal components of the AC indoor unit 2001 for controlling the internal components. Otherwise, if the wire 2231 is disorderly placed inside the cases 2210, 2220, it is likely to be damaged. The wire holder 2260 may thus be arranged to orderly arrange the wire 2231.

[0448] The wire holder 2260 may be placed on one side or both sides of the space where the PCB 2230 is located in the lower case 2220. Among the entire wire 2231 extending to either sides from the PCB 2230, some may be held by the wire holder 2260 while others may extend to the outside of the cases 2210, 2220.

[0449] The wire holder 2260 may be formed by three hooks 2261, 2262, and 2263 arranged in the form of a